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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,753	07/30/2004	Dinesh R. Patel	68.0505	4752

35204 7590 02/20/2007  
SCHLUMBERGER RESERVOIR COMPLETIONS  
14910 AIRLINE ROAD  
ROSHARON, TX 77583

EXAMINER
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HARCOURT, BRAD

ART UNIT	PAPER NUMBER
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3672

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/710,753

Applicant(s)

PATEL, DINESH R.

Examiner

Brad Harcourt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, and 19-23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Williamson (US Patent No. 6,668,936).

Williamson discloses a hydraulic control system comprising four valve assemblies 12, 14, 16 and 18; a hydraulic control module 32; and hydraulic fluid line 36 which actuates valves 12, 14, 16 and 18 by receiving fluid from hydraulic control module 32. All of the assemblies act as flow valves since they each correspond to a respective production zone and each valve also prevents cross flow between its respective formation and any other formations. In reference to claims 4 and 5, Williamson discloses that the system could be “intersecting any number of zones” (col. 3, line 24) and thereby could have any number of flow valves all of which are actuated by the hydraulic control device. It is also disclosed that this system can be used to “regulate a rate of production from a zone, to regulate a rate of fluid injection into a zone, etc. (col. 8, lines 27-29). In reference to claims 2 and 20, it is understood that the flow and cross flow valves both are multi position valves. In reference to claims 3, 21 and 23, it is inherent that if a hydraulic control line actuated a valve, the actuating step would be a

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pressure cycle and the valves would be actuated when the hydraulic pressure rose above a certain pressure.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williamson (US Patent No. 6,668,936) in view of Murray (US Patent No. 8,862,865).

Williamson discloses most of the limitations of the claims, but does not disclose using a flapper valve and sleeve valves together. Murray discloses a gas lift system comprising a gas lift system comprising a flapper valve 16 and a sleeve valve 30 that are controlled by "existing control line connections" (col. 1, line 53). Said flapper comprises a flapper 18 which is actuated by a piston 26 that receives pressure from pressure chamber 28 and is biased closed by spring 24. Sleeve valve 30 comprises a sleeve 32, port 34 and a piston 40 that receives pressure from pressure conduit 42. In reference to claims 11 and 12, the flapper is biased closed by spring 24 and would only open when enough hydraulic pressure is exerted on piston 26. In reference to claim 14, the flapper valve disclosed by Murray would act as a cross-flow prevention valve and would prevent cross-flow between two multi-position valves. It would have been obvious to a person having ordinary skill in the art at the time of the invention to include

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a flapper valve and control it by the same hydraulic line that controls the other valves of Williamson in view of Murray to better prevent cross-flow between two adjacent formations.

### ***Response to Arguments***

Applicant's arguments filed 12/11/2006 have been fully considered but they are not persuasive.

The applicant amended the title of the invention and the objection is withdrawn.

The applicant argues that the rejection to claims 1-13 and 19-23 should be withdrawn as Williamson (US Patent No. 6,668,936) does not disclose a flow valve and a cross-flow prevention valve that are both controlled by one hydraulic control line. However, Williamson discloses the usage of "one or more control lines 34, or other types of flowpaths" (col. 3, lines 32-33). The applicant quotes a section of the specification, column 6, where multiple lines are used to control multiple valves, but that does not exclude the presence of other embodiments where one hydraulic line can be used.

Applicant's arguments with respect to claims 14-18 have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brad Harcourt whose telephone number is 571-272-7303. The examiner can normally be reached on Monday through Friday from 8:30 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

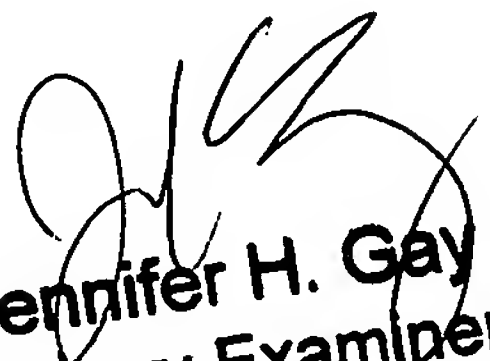
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David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

BH  
2/14/2007



Jennifer H. Gay  
Primary Examiner